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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/659,753	YUZAWA, JIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Richard L. Leung	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 15 February 2005.
2. ☒ The allowed claim(s) is/are 2,4-6 and 8.
3. ☒ The drawings filed on 10 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114; and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 February 2005 has been entered.

***Allowable Subject Matter***

2. Claims 2, 4, 5, 6, and 8 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Applicant has indicated that the claimed weight percentage range for R125, R508A or B, and R14, now presented in amended independent claim 2, have particular advantages pertinent to the refrigeration circuit of the present invention (Remarks, page 5, paragraph 5). EP 1136540 A1 (Yuzawa) discloses a similar composition comprising R125, R508A or B, and R14, however Yuzawa provides ranges that are broader than said claimed ranges (paragraph [0010]). The guidelines set forth by MPEP § 2131.03 recite, "If the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with 'sufficient specificity' to constitute an anticipation of the claims. The unexpected results may also render the claims unobvious." Therefore

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the broad ranges presented by Yuzawa do not appear to disclose the claimed range with sufficient specificity to be considered anticipatory given said particular advantages. It should be noted that while Yuzawa does demonstrate an example wherein the weight percentages for R125 and R508A lie within the claimed ranges, the weight percentage given for R14 does not (paragraph [0029]). Furthermore, the claimed composition requires R245fa, a component not disclosed by Yuzawa. In the previously presented rejections, WO 02/26913 A2 (Singh et al.) was relied upon for teaching the use of R245fa as a component in mixed refrigerants, and the motivation to replace the flammable R600 used by Yuzawa with R245fa was derived from the belief that R245fa is a safer, non-flammable component. Applicant's revelation that R245fa is an inflammable refrigerant (Remarks, page 5, paragraph 3), however, renders said motivation and said rejections inappropriate. Accordingly, claims 2, 4, 5, 6, and 8 are considered to be allowable over the cited prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6652769 B1 (Yuzawa): discloses a refrigerant mixture comprising R600, R125, R508A, and R14.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Leung whose telephone number is 571-272-4811. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Leung  
Examiner  
Art Unit 3744

  
**CHERYL TYLER**  
**SUPERVISORY PATENT EXAMINER**

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